

In the Claims

Please amend the claims as follows:

1. (currently amended) ~~An apparatus for performing a cell search, the apparatus~~ A cell search block, the cell search block comprising:

a first correlation arrangement that correlates for a primary synchronization code in a received signal to produce a first correlated signal;

a second correlation arrangement that correlates for a secondary synchronization code in the received signal to produce a second correlated signal; and

logic that derives a frequency adjustment signal from the first correlated signal and combines the frequency adjustment signal with the second correlated signal to reduce a frequency offset in the second correlated signal such that a secondary synchronization channel of a cell is acquired in the cell search block.

2. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, further comprising:

a frequency adjustment block that receives the first correlated signal and produces the frequency adjustment signal.

3. (currently amended) The ~~apparatus~~ cell search block set forth in claim 2, wherein the frequency adjustment block comprises a primary synchronization code ("PSC") frequency adjustment block.

4. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the first correlation arrangement includes primary synchronization code ("PSC") correlators.

5. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the secondary correlation arrangement includes secondary synchronization code ("SSC") *b* correlators.

6. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the primary synchronization code corresponds to an a sequence of a Primary SCH channel.
7. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the secondary synchronization code corresponds to a b sequence of a Secondary SCH channel.
8. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the apparatus comprises a portion of a code division multiple access receiver.
9. (currently amended) The ~~apparatus~~ cell search block set forth in claim 1, wherein the apparatus comprises a portion of a receiver that complies with the Universal Mobile Telecommunications System ("UMTS") Wideband Code Division Multiple Access ("WCDMA") standard.
10. (previously presented) A code division multiple access ("CDMA") receiver that receives a CDMA signal, the CDMA receiver comprising:
- an analog-to-digital converter that receives a CDMA signal and converts the CDMA signal into a digital signal;
 - a matched filter that filters the digital signal to produce a filtered digital signal;
 - a tapped delay line that receives the filtered digital signal and produces a delayed filtered digital signal; and
 - a cell search block, comprising:
 - a first correlation arrangement that correlates at least a portion of the delayed filtered digital signal for a primary synchronization code in the received signal to produce a first correlated signal;
 - a second correlation arrangement that correlates at least a portion of the delayed filtered digital signal for a secondary synchronization code in the received signal to produce a second correlated signal; and
 - logic that derives a frequency adjustment signal from the first correlated signal and combines the frequency adjustment signal with the second correlated

signal to reduce a frequency offset in the second correlated signal such that a secondary synchronization channel of a cell is acquired.

11. (previously presented) The CDMA receiver set forth in claim 10, further comprising:

a frequency adjustment block that receives the first correlated signal and produces the frequency adjustment signal.

12. (original) The CDMA receiver set forth in claim 11, wherein the frequency adjustment block comprises a primary synchronization code ("PSC") frequency adjustment block.

13. (previously presented) The CDMA receiver set forth in claim 10, wherein the first correlation arrangement includes primary synchronization code ("PSC") correlators.

14. (previously presented) The CDMA receiver set forth in claim 10, wherein the second correlation arrangement includes secondary synchronization code ("SSC") *b* correlators.

15. (currently amended) A method of performing a cell search, comprising:

correlating against a primary synchronization code of ~~the a~~ received signal to produce a first correlated signal;

correlating against a secondary synchronization code of the received signal to produce a second correlated signal, the secondary synchronization code being different than the primary synchronization code;

deriving a frequency adjustment factor from the first correlated signal; and

combining the frequency adjustment factor with the second correlated signal to reduce a frequency offset in the second correlated signal such that a secondary synchronization channel of a cell is acquirable.

16. (previously presented) The method set forth in claim 15, wherein the primary synchronization code corresponds to an *a* sequence of a Primary SCH channel.

17. (previously presented) The method set forth in claim 15, wherein the secondary synchronization code corresponds to a *b* sequence of a Secondary SCH channel.

18. (original) The method set forth in claim 15, further comprising the step of:
determining the complex conjugate of an imaginary portion of the first correlated signal.

19. (previously presented) The method set forth in claim 15, further comprising the step of:
multiplying the first correlated signal by a primary synchronization code sequence to derive the frequency adjustment factor.

20. (previously presented) The method set forth in claim 19, further comprising the step of:
determining the complex conjugate of an imaginary portion of the first correlated signal to form an imaginary portion of the frequency adjustment factor.